

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A data transmission device, in which electronic program guide (EPG) data associated with and multiplexed with broadcast program data is produced and transmitted, comprising:

producing means for producing the EPG data, the EPG data including one or more tables corresponding to one or more types of tables, each of the one or more types of tables being determined in advance to include multiple constituent information elements; and

transmitting means for transforming the EPG data produced by the producing means into a bit stream and transmitting the bit stream;

wherein the data transmission device is configured to:

calculate an amount of information that would be included in the EPG data if the producing means produced the one or more tables in the EPG data to include all of the constituent information elements of the corresponding one or more types of tables,

~~when the data transmission device determines whether the calculated s that the~~
amount of information in the EPG data ~~produced by the producing means would exceed s an~~
amount necessary to repeatedly send out at least one type of table in the EPG data via the bit stream at a frequency equal to or higher than a predetermined sending-out frequency of the at least one type of table, while transmitting the bit stream at a rate equal to or lower than a predetermined bit rate, and

when the calculated amount of information is determined to exceed the necessary amount, perform the following:

adapt the producing means to omit at least one of the constituent information elements from at least one of the tables in the produced EPG data so that the amount of information in the produced EPG data is decreased so that the amount of information in the EPG data is less than or equal to the necessary amount, and

transmit the EPG data including the at least one of the tables from which the at least one of the constituent elements has been omitted.

2-7. (Canceled)

8. (Previously Presented) A data sending-out device according to claim 1, wherein multiple types of tables are produced by the producing means by adjusting the amounts of information in the types of tables according to a plurality of priorities of the types of tables to allow the bit stream to be transmitted at a bit rate equal to or lower than the predetermined bit rate and allow the tables to be sent out at frequencies equal to or higher than specific sending-out frequencies of the types of tables.

9. (Currently Amended) A data sending-out device according to claim 1, wherein
multiple types of tables are produced by the producing means, and
when the calculated amount of information exceeds the necessary amount, the data
sending-out device further by-adjusts ing-the amounts of information in the types of tables according to a plurality of sending-out frequency reduction rates of the types of tables to allow the bit stream to be transmitted at a bit rate equal to or lower than the predetermined bit rate and allow the tables to be sent out at frequencies equal to or higher than specific sending-out frequencies of the types of tables.

10. (Currently Amended) A data sending-out device according to claim 8, wherein
when the calculated amount of information exceeds the necessary amount, the types of
tables are produced by the producing means by-adjusts ing-the amounts of information in the types of tables according to a plurality of sending-out frequency reduction rates of the types of tables to allow the bit stream to be transmitted at a bit rate equal to or lower than the predetermined bit rate and allow the tables to be sent out at frequencies equal to or higher than the specific sending-out frequencies of the types of tables.

11-13. (canceled)

14. (Currently Amended) A data sending-out device according to claim 1, wherein

after the one or more tables are again-produced by the producing means, the producing means is caused to again produce the one or more tables with an adjusted amount of information in cases where the transmitting means determines that it is impossible to transmit the bit stream at a bit rate equal to or lower than the prescribed upper limit bit rate or it is impossible to send out the at least one type of table at a frequency equal to or higher than the specific sending-out frequency.

15. (Currently Amended) A data sending-out device according to claim 1, wherein the amount of information to be included in the EPG data is calculated prior to the production of the EPG data, and the EPG data is produced by the producing means by omitting the at least one of the constituent information elements, thereby adjusting the amount of information to be included in the EPG data to allow the bit stream to be transmitted at a bit rate equal to or lower than the predetermined bit rate and to allow the at least one type of table to be sent out at a frequency equal to or higher than the specific sending-out frequency.

16. (Currently Amended) A data sending-out device according to claim 8, wherein the amount of information to be included in the EPG data is calculated prior to the production of the EPG data, and the EPG data is produced by the producing means by omitting the at least one of the constituent information elements, thereby adjusting the amount of information to be included in the EPG data to allow the bit stream to be transmitted at a bit rate equal to or lower than the predetermined bit rate and to allow the at least one type of table to be sent out at a frequency equal to or higher than the specific sending-out frequency.

17. (Currently Amended) A data sending-out device according to claim 9, wherein the amount of information in to be included in the EPG data is calculated prior to the production of the EPG data, and the EPG data is produced by the producing means by omitting the at least one of the constituent information elements, thereby adjusting the amount of information to be included in the EPG data to allow the bit stream to be transmitted at a bit rate equal to or lower than the

predetermined bit rate and to allow the at least one type of table to be sent out at a frequency equal to or higher than the specific sending-out frequency.

18. (Previously Presented) A data sending-out device according to claim 15, wherein, prior to the production of at least one type of table,

the amount of information for each type of table information in the EPG data for which the amount of is not predetermined is detected and added to a summed value in the calculation of the amount of information,

the amount of information for each type of table information in the EPG data for which the amount is predetermined is read out from a record and is added to the summed value in the calculation of the amount of information, and

the amount of information in the EPG data is calculated.

19. (Previously Presented) A data sending-out device according to claim 16, wherein, prior to the production of at least one type of table,

the amount of information for each type of table in the EPG data for which the amount is not predetermined is detected and added to a summed value in the calculation of the amount of information,

the amount of information for each type of table in the EPG data for which the amount is predetermined is read out from a record and is added to the summed value in the calculation of the amount of information, and

the amount of information in the EPG data is calculated.

20. (Previously Presented) A data sending-out device according to claim 17, wherein, prior to the production of at least one type of table,

the amount of information for each type of table in the EPG data for which the amount is not predetermined is detected and added to a summed value in the calculation of the amount of information,

the amount of information for each type of table in the EPG data for which the amount is predetermined is read out from a record and is added to the summed value in the calculation of the amount of information, and

the amount of information in the EPG data is calculated.

21. (Currently Amended) The data sending-out device according to claim 1, wherein

the producing means produces multiple types of tables, and

when the amount of information in the EPG data exceeds the necessary amount to achieve the predetermined bit rate and the sending out frequency, the amount of information in the EPG data is decreased according to at least one of: relative priorities of the types of tables, and relative importance of types of constituent information elements within a table.

22. (Currently Amended) The data sending-out device according to claim 21, wherein the amount of information in the EPG data is decreased by ~~deleting-omitting a constituent information element~~ of relative low importance compared to other constituent information elements.